

ABSTRACT:

The invention relates to a low-pressure gas discharge lamp which includes at least one discharge vessel and at least two capacitive coupling-in structures and operates at an operating frequency f . In order to achieve a better efficiency in combination with a small structural volume, a high luminous flux, a low operating voltage, a low electromagnetic emission, a high resistance against switching transients and a long service life for the low-
5 pressure gas discharge lamp, it is proposed to form each capacitive coupling-in structure from at least one dielectric having a thickness d and a dielectric constant ϵ , each dielectric being subject to the condition $d/(f \cdot \epsilon) < 10^{-8}$ cm.s. A substantially larger amount of light can thus be generated per lamp length (lumen/cm).